

## CLAIMS

1. A method for customizing attributes of a distributed processing system, comprising the operations of:

loading at least one core attribute defining a first characteristic of a processing  
5 resource;

reading a dynamic list file having information concerning a first dynamic attribute, wherein the first dynamic attribute defines a second characteristic of the processing resource;

loading the first dynamic attribute utilizing the information in the dynamic list  
10 file; and

registering the core attribute and the first dynamic attribute to a lookup service to advertise the availability of the processing resource to execute software processing jobs having a set of requirements.

15 2. A method as recited in claim 1, wherein the information in the dynamic attribute list includes a location of the first dynamic attribute and a name of the first dynamic attribute.

3. A method as recited in claim 2, wherein the first dynamic attribute is  
20 implemented as a class.

4. A method as recited in claim 3, wherein an agent process executing on the processing resource is utilized to load the first dynamic attribute and the core attribute.

5 5. A method as recited in claim 4, further comprising the operations of:

adding a information concerning a second dynamic attribute to the dynamic attribute list file after the agent process, wherein the second dynamic attribute defines a third characteristic of the processing resource; and

loading the second dynamic attribute after the agent process has begun executing.

10 6. A method as recited in claim 5, wherein the second dynamic attribute is implemented as a class.

15 7. A method as recited in claim 6, wherein the first dynamic attribute class and the second dynamic attribute class are each derived from a predefined parent attribute class.

8. A computer program embodied on a computer readable medium for customizing attributes of a distributed processing system, comprising:

a code segment that loads at least one core attribute defining a first characteristic of a processing resource;

a code segment that reads a dynamic list file having information concerning a first dynamic attribute, wherein the first dynamic attribute defines a second characteristic of the processing resource;

a code segment that loads the first dynamic attribute utilizing the information in the dynamic list file; and

a code segment that registers the core attribute and the first dynamic attribute to a lookup service to advertise the availability of the processing resource to execute software processing jobs having a set of requirements.

9. A computer program as recited in claim 8, wherein the information in the dynamic attribute list includes a location of the first dynamic attribute and a name of the first dynamic attribute.

10. A computer program as recited in claim 9, wherein the first dynamic attribute is implemented as a class.

11. A computer program as recited in claim 10, wherein an agent process executing on the processing resource is utilized to load the first dynamic attribute and the core attribute.

5 12. A computer program as recited in claim 11, further comprising:

a code segment that reads information concerning a second dynamic attribute to the dynamic attribute list file after the agent process has begun executing, wherein the second dynamic attribute defines a third characteristic of the processing resource; and

10 a code segment that loads the second dynamic attribute after the agent process has begun executing.

13. A computer program as recited in claim 12, wherein the second dynamic attribute is implemented as a class.

15 14. A computer program as recited in claim 13, wherein the first dynamic attribute class and the second dynamic attribute class are each derived from a predefined parent attribute class.

20 15. A system for customizing attributes of a distributed processing system, comprising:

a lookup service capable of advertising attributes of a processing resource;

a processing resource executing an agent process, wherein the agent process being in communication with the lookup service, and wherein the processing resource is capable of loading a set of core attributes defining characteristics of the processing resource;

a plurality of dynamic attribute classes; and

a dynamic attribute list file providing information concerning the dynamic attribute classes, wherein the agent process reads the dynamic attribute list to obtain the information concerning the dynamic attribute classes, and wherein the agent process loads the plurality of dynamic attribute classes utilizing the information concerning the dynamic attribute classes.

16. A system as recited in claim 15, further comprising a system controller that scans the lookup service to find processing resources having particular characteristics.

17. A system as recited in claim 16, wherein the system controller selects a processing resource from the processing resources based on the attributes of the processing resource advertised by the lookup service.

18. A system as recited in claim 17, further comprising a parent attribute class that defines particular characteristics of an attribute.

19. A system as recited in claim 18, wherein each dynamic attribute class is  
5 derived from the parent attribute class utilizing an inheritance property.

20. A system as recited in claim 19, wherein the agent process re-examines the dynamic list file when the dynamic list file is updated.

Patent Application